Carbon Sequestration Questions for Forest Service: Steven H. Rich

Utah Commission for the Stewardship of Public Lands hearing, 8/20/2015

Exhibit: From the Obama Administration:

Priority Agenda

Enhancing the Climate Resilience of America's Natural Resources

COUNCIL ON CLIMATE PREPAREDNESS AND RESILIENCE

Key Themes and Commitments [abbreviated]

1. Foster climate-resilient lands and waters – Protect important landscapes…

2. Manage and enhance U.S. carbon sinks – Conserve and restore soils, forests, grasslands…

3. Enhance community preparedness and resilience by utilizing and sustaining natural resources – Harness the benefits of nature to protect communities from harm and build innovative 21st century infrastructure that integrates natural systems into community development.

4. Modernize Federal programs [and policies]…to build resilience and enhance sequestration of biological carbon…"

Federal agencies will take action to encourage investment in natural infrastructure to improve resilience and enhance natural defenses [Does this mean Forest thinning? Targeted grazing? Manage pinion/juniper stem densities? Meadow restoration for firebreaks?]

Questions:

1.) Exhibit (fixed point historical photo of progressive tree overstocking): https://commons.wikimedia.org/wiki/File:Forest_Development_in_Bitterroot.jpg 100 years of federal policy have greatly increased tree densities since the late 1800's. Before this time, Native Americans actively created resilient, healthy, highly biodiverse, open forest structures in response to fire danger, economic needs, etc. (see historic site photos. The central tree is a fixed point). This same tree overstocking and general woody species increases have occurred in Utah, causing vastly increased incidence and severity of large wildfires and insect infestations, etc. Without profound policy changes, these dangers will be magnified. Is the Forest Service mounting a crisis-level response, using woody species thinning and all other available, proven restoration methods?

2.) Beyond certain thresholds, increased density of pinyon/juniper woodland, sagebrush, etc. cause 90%+ plant and animal biodiversity losses, soil quality damage, severe erosion, and massive soil carbon losses to the atmosphere. Degraded lands do not sequester CO2. Fire in dense, badly eroded and otherwise damaged P/J stands, for example, generates massive CO2 emissions, degrading such sites below recovery thresholds. In view of Executive Order 13653, has the Forest Service "tooled up" for a crisis-level response to restore these lands health and sequestration capacity, using thinning and all other available, long-proven restoration methods?

3.) Carbon sequestration researchers *have identified targeted, prescribed grazing as a necessary component of rapid CO2 soil sequestration processes*. Utah State University's Wildland Resources Dept. hosts the BEHAVE program. One BEHAVE focus is use of grazing animals as tools of ecological restoration. Animals have ecological impacts not reproducible by fire and machinery. Has the Forest Service "tooled up" for a crisis-level response, using this proven research to improve soil health, restore Sage Grouse habitat, etc., and deal with damaging woody species densities, invasive plants, etc.?

4.) The Grazing Response Index directly controls and optimizes timing, intensity and frequency of grazing. These dynamics sequester carbon through rapid, positive, widespread ecological healing. Federal grazing guidelines were drafted without reference to carbon sequestration. Light stocking rates, set on/off dates, etc., and prolonged grazing exposure periods cannot achieve accelerated sequestration at whole-allotment scales. Many High GRI-score practices are presently difficult, even prohibited, on many federal lands. As a crisis-level response to climate change, does your agency intend to change grazing policy, guidelines, regulations, institutional resistance, etc. to focus on grazing practices which strongly increase CO2 sequestration? (Such as those used with wonderful ecological effect at Deseret Ranch, etc.)

5.) As stated above, if Utah and the West functioned as they did in the late 184O's, the administration's resilience and sequestration goals would be achieved. Elements 5 and 6 of the Forest Service' "Climate Change Performance Scorecard" call for use of Native American cultural wisdom. Ecosystem functioning directly determined most cultures' survival. They were all very active land managers. In the West, First Nations' extensive prescribed fire use, sylvaculture, protopastoralism, etc.—were sophisticated life-or-death responses. These attitudes persist. After the Rodeo/Chediski Fire, for example, unlike the lawsuit-plagued agencies, today's White Mountain Apaches immediately brought their logging industry to bear as a restoration tool. Many Native attitudes and practices had been known to the government for centuries before the Native-practice-inspired "Light Burning Controversy" of the late 19th and early 20th centuries. Will the Forest Service implement Natives' inspired pragmatism to create forest structures and living communities that meet sequestration goals and society's needs?

6.) Many Forest Service employees express extreme frustration with the unscientific management constraints created by NGO lawsuits, such as the destruction of the western timber harvest industry's landscape scale capacity to effect forest health treatments, delayed or eliminated salvage logging, unfunded restoration practices, etc. Given the urgent nature of the situation, with the West on fire and extreme threats looming, will the agency, based on long-established partnership relations with these groups, insist that they reevaluate long-held positions which strip the Forest Service of many proven management options?